FIG. 1

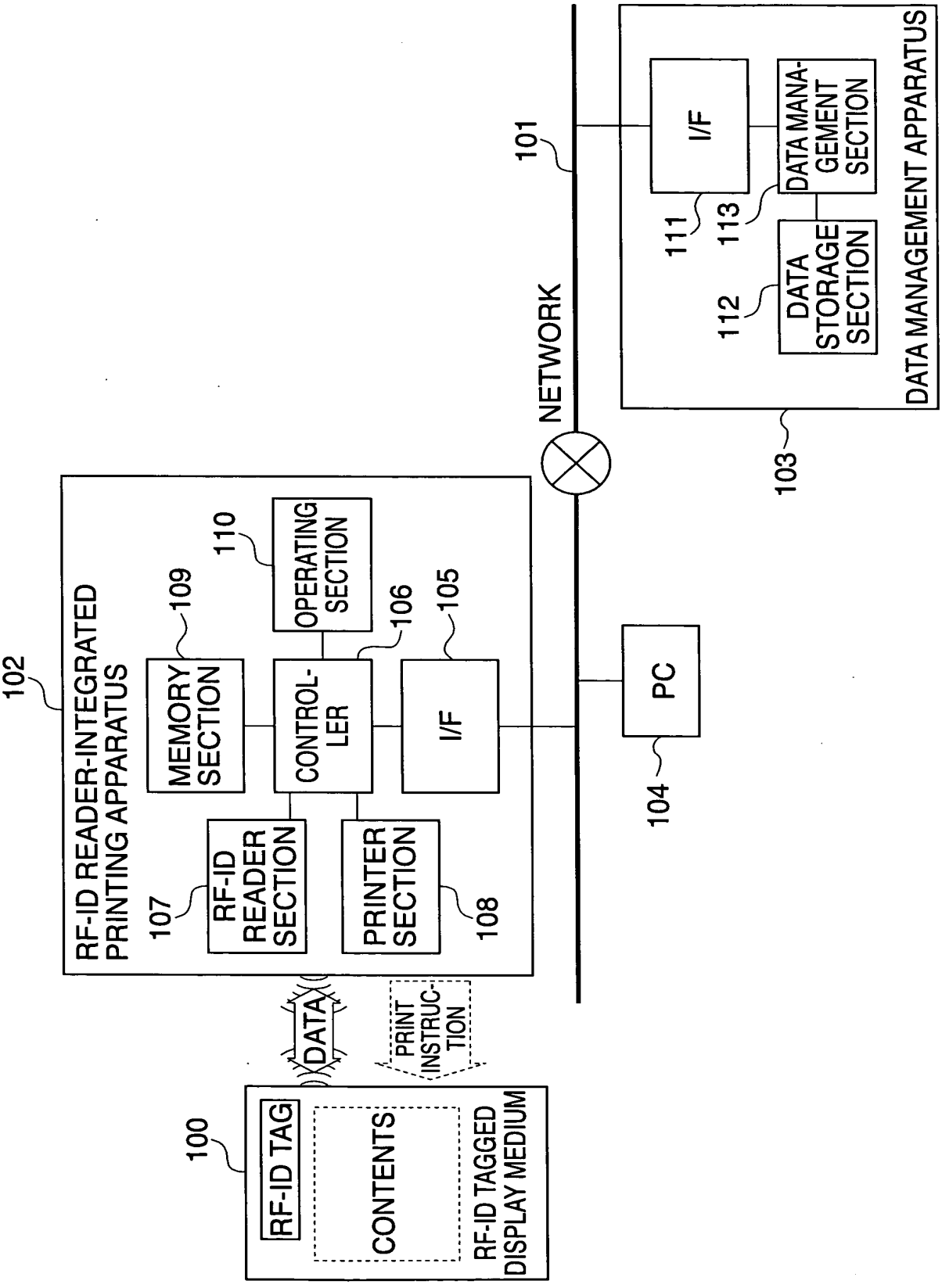

RF-ID TAGGED DISPLAY MEDIUM
100
RF-ID TAG
CONTENTS
DATA
PRINT INSTRUC-TION
RF-ID READER-INTEGRATED PRINTING APPARATUS
102
RF-ID READER SECTION
107
PRINTER SECTION
108
MEMORY SECTION
109
CONTROL-LER
106
OPERATING SECTION
110
I/F
105
NETWORK
101
PC
104
DATA MANAGEMENT APPARATUS
103
I/F
111
DATA STORAGE SECTION
112
DATA MANA-GEMENT SECTION
113

FIG. 2

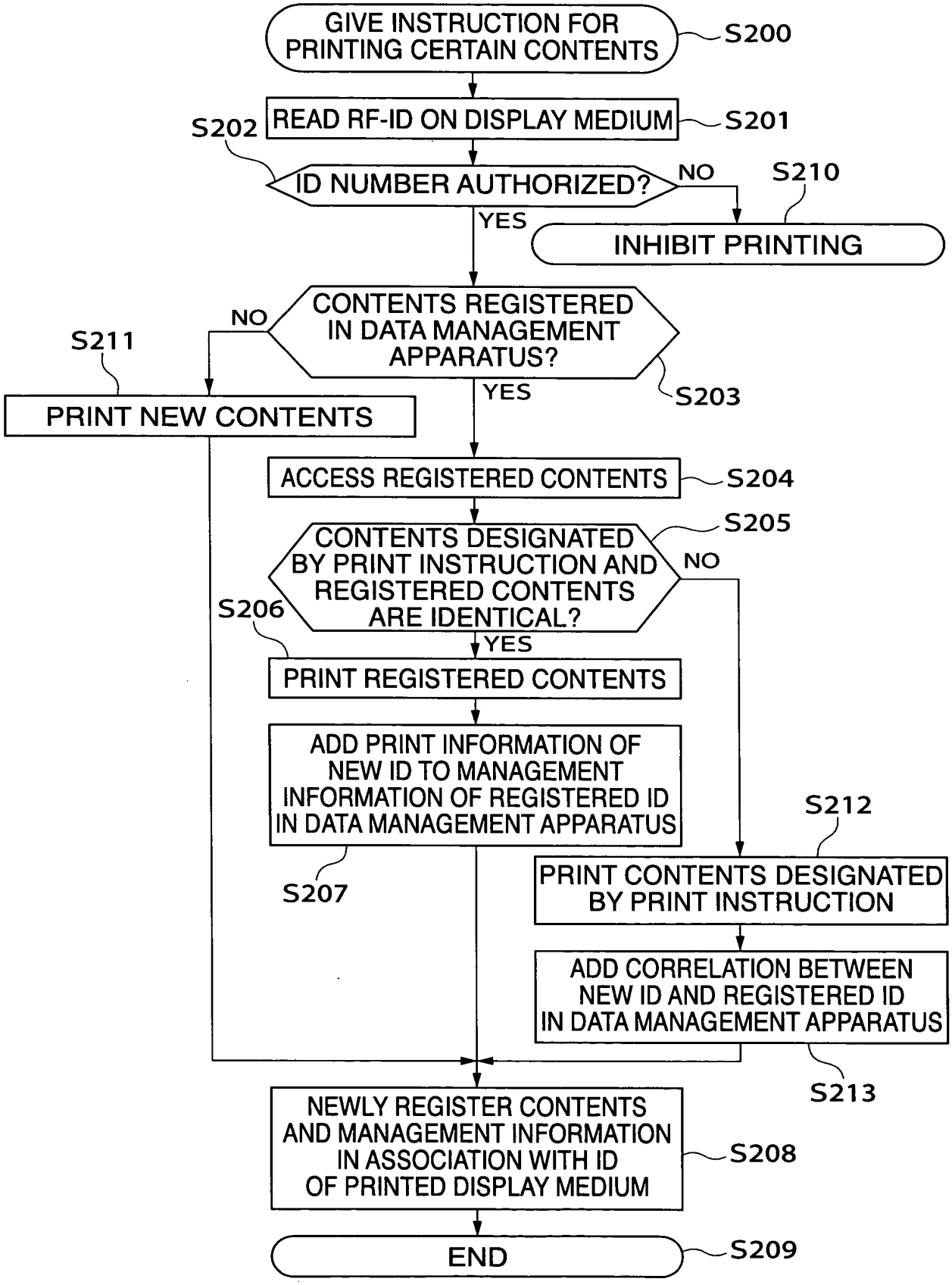

GIVE INSTRUCTION FOR PRINTING CERTAIN CONTENTS
S200
READ RF-ID ON DISPLAY MEDIUM
S201
S202
ID NUMBER AUTHORIZED?
NO
S210
YES
INHIBIT PRINTING
CONTENTS REGISTERED IN DATA MANAGEMENT APPARATUS?
NO
S211
YES
S203
PRINT NEW CONTENTS
ACCESS REGISTERED CONTENTS
S204
CONTENTS DESIGNATED BY PRINT INSTRUCTION AND REGISTERED CONTENTS ARE IDENTICAL?
S205
NO
S206
YES
PRINT REGISTERED CONTENTS
ADD PRINT INFORMATION OF NEW ID TO MANAGEMENT INFORMATION OF REGISTERED ID IN DATA MANAGEMENT APPARATUS
S207
S212
PRINT CONTENTS DESIGNATED BY PRINT INSTRUCTION
ADD CORRELATION BETWEEN NEW ID AND REGISTERED ID IN DATA MANAGEMENT APPARATUS
S213
NEWLY REGISTER CONTENTS AND MANAGEMENT INFORMATION IN ASSOCIATION WITH ID OF PRINTED DISPLAY MEDIUM
S208
END
S209

FIG. 3

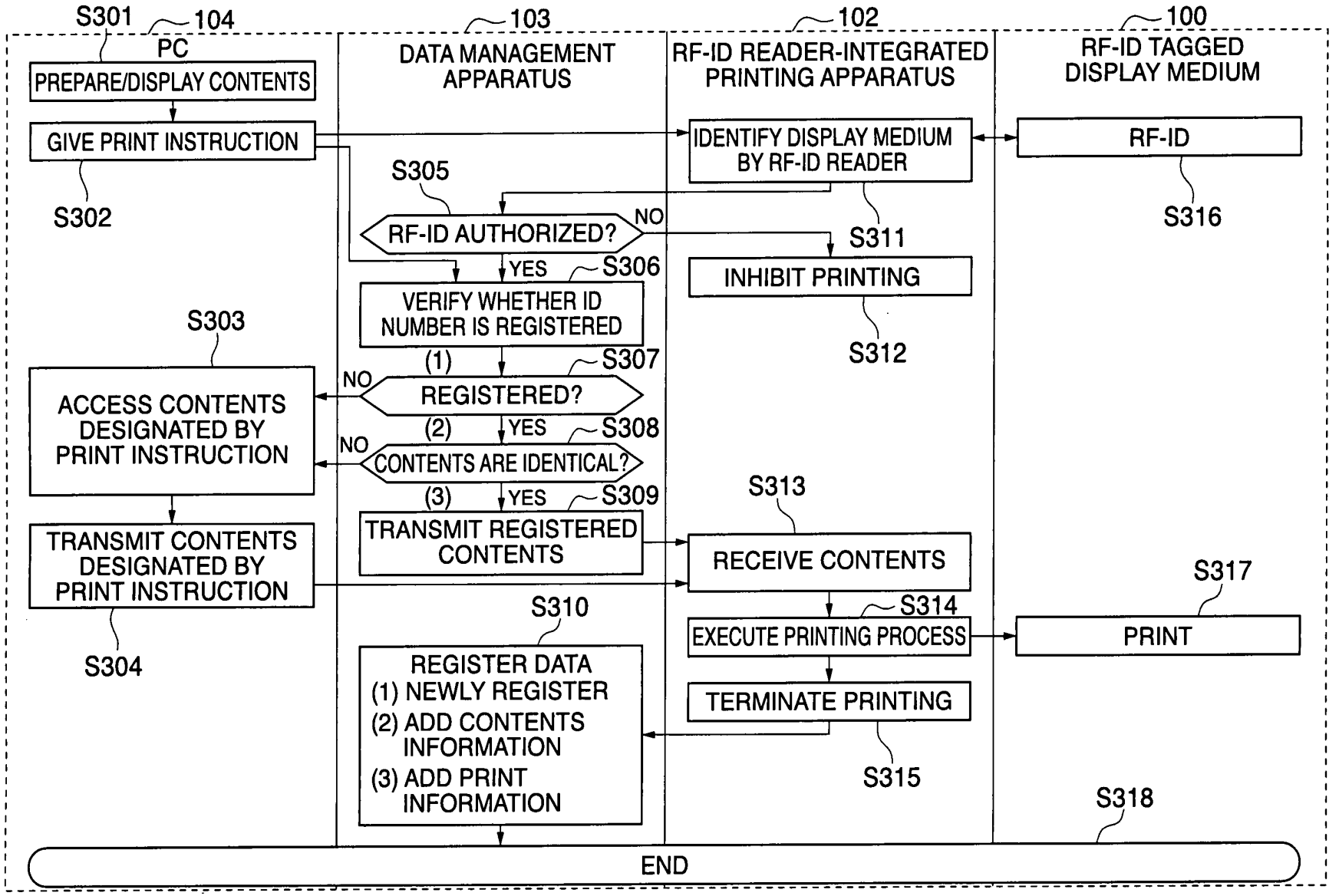

S301
104
PC
PREPARE/DISPLAY CONTENTS
GIVE PRINT INSTRUCTION
S302
103
DATA MANAGEMENT APPARATUS
102
RF-ID READER-INTEGRATED PRINTING APPARATUS
100
RF-ID TAGGED DISPLAY MEDIUM
IDENTIFY DISPLAY MEDIUM BY RF-ID READER
RF-ID
S316
S311
S305
RF-ID AUTHORIZED?
NO
YES
S306
INHIBIT PRINTING
S312
VERIFY WHETHER ID NUMBER IS REGISTERED
S303
(1)
S307
NO
REGISTERED?
ACCESS CONTENTS DESIGNATED BY PRINT INSTRUCTION
(2)
YES
S308
NO
CONTENTS ARE IDENTICAL?
(3)
YES
S309
S313
TRANSMIT REGISTERED CONTENTS
RECEIVE CONTENTS
S317
TRANSMIT CONTENTS DESIGNATED BY PRINT INSTRUCTION
S304
S310
S314
EXECUTE PRINTING PROCESS
PRINT
REGISTER DATA
(1) NEWLY REGISTER
(2) ADD CONTENTS INFORMATION
(3) ADD PRINT INFORMATION
TERMINATE PRINTING
S315
S318
END

FIG. 4

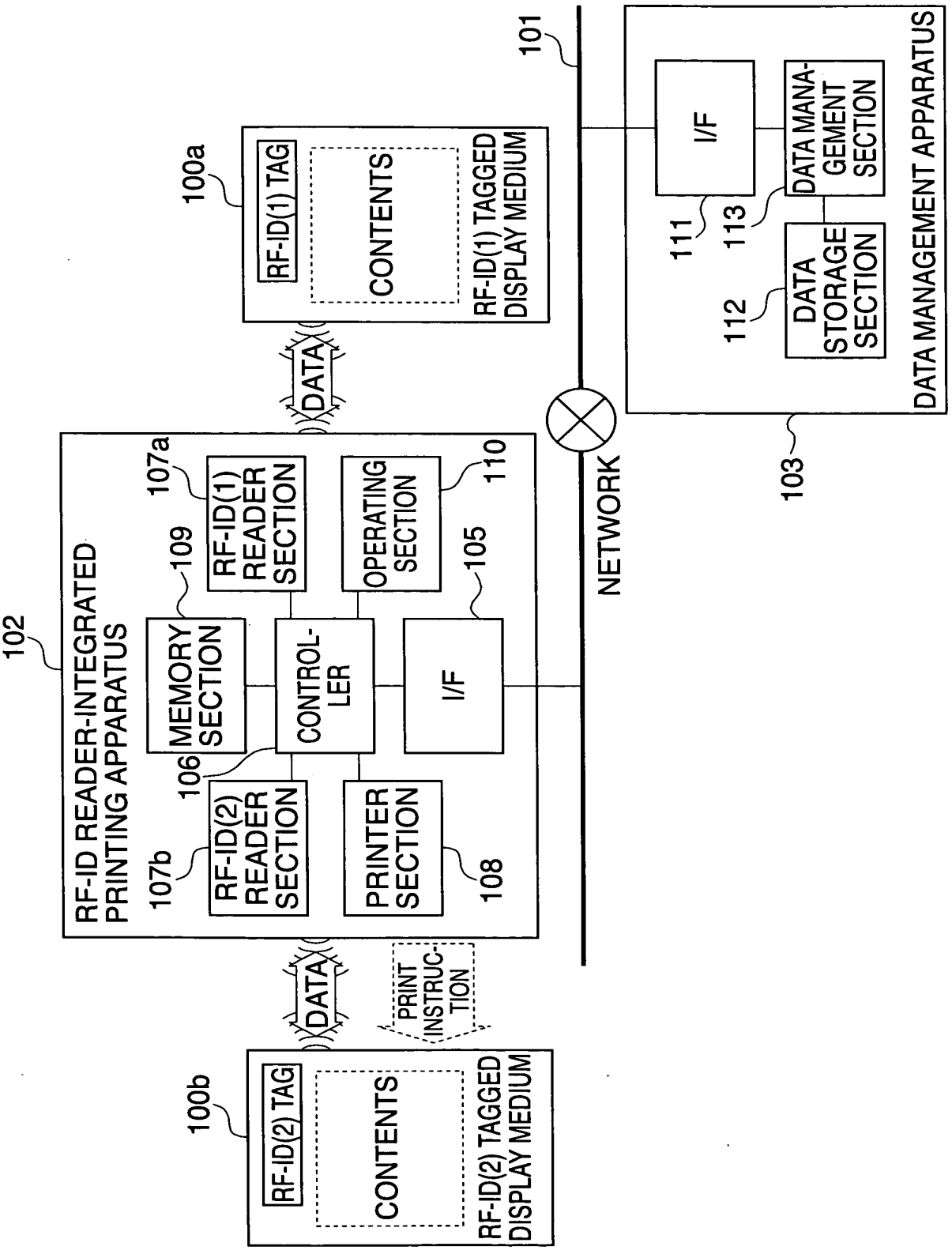

RF-ID READER-INTEGRATED PRINTING APPARATUS
102
MEMORY SECTION
109
CONTROL-LER
106
I/F
105
RF-ID(1) READER SECTION
107a
RF-ID(2) READER SECTION
107b
OPERATING SECTION
110
PRINTER SECTION
108
NETWORK
101
DATA MANAGEMENT APPARATUS
103
I/F
111
DATA MANA-GEMENT SECTION
113
DATA STORAGE SECTION
112
DATA
DATA
PRINT INSTRUC-TION
100a
RF-ID(1) TAG
CONTENTS
RF-ID(1) TAGGED DISPLAY MEDIUM
100b
RF-ID(2) TAG
CONTENTS
RF-ID(2) TAGGED DISPLAY MEDIUM

FIG. 5

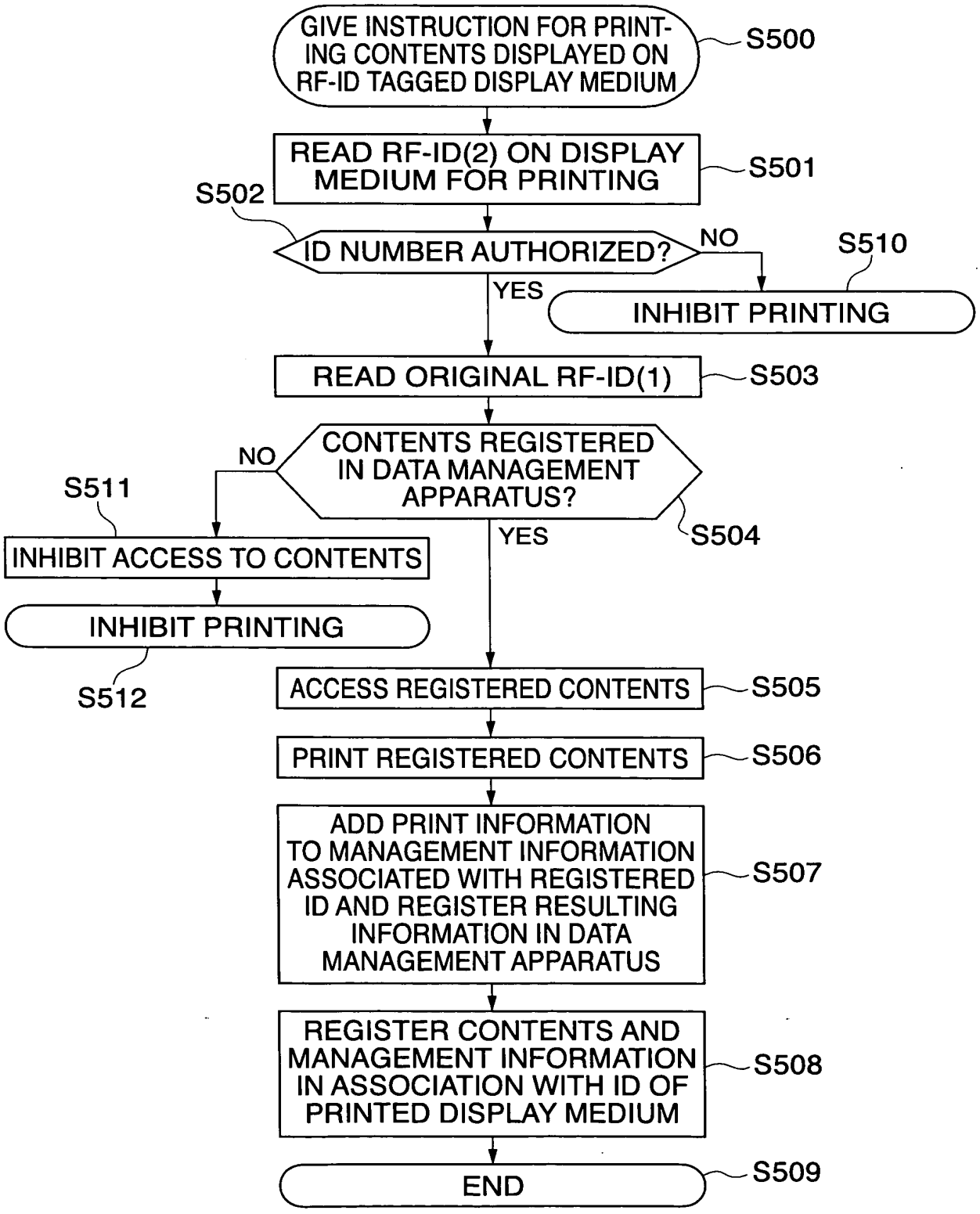

GIVE INSTRUCTION FOR PRINTING CONTENTS DISPLAYED ON RF-ID TAGGED DISPLAY MEDIUM
S500
READ RF-ID(2) ON DISPLAY MEDIUM FOR PRINTING
S501
S502
ID NUMBER AUTHORIZED?
NO
S510
YES
INHIBIT PRINTING
READ ORIGINAL RF-ID(1)
S503
NO
CONTENTS REGISTERED IN DATA MANAGEMENT APPARATUS?
S504
S511
YES
INHIBIT ACCESS TO CONTENTS
INHIBIT PRINTING
S512
ACCESS REGISTERED CONTENTS
S505
PRINT REGISTERED CONTENTS
S506
ADD PRINT INFORMATION TO MANAGEMENT INFORMATION ASSOCIATED WITH REGISTERED ID AND REGISTER RESULTING INFORMATION IN DATA MANAGEMENT APPARATUS
S507
REGISTER CONTENTS AND MANAGEMENT INFORMATION IN ASSOCIATION WITH ID OF PRINTED DISPLAY MEDIUM
S508
END
S509

FIG. 6

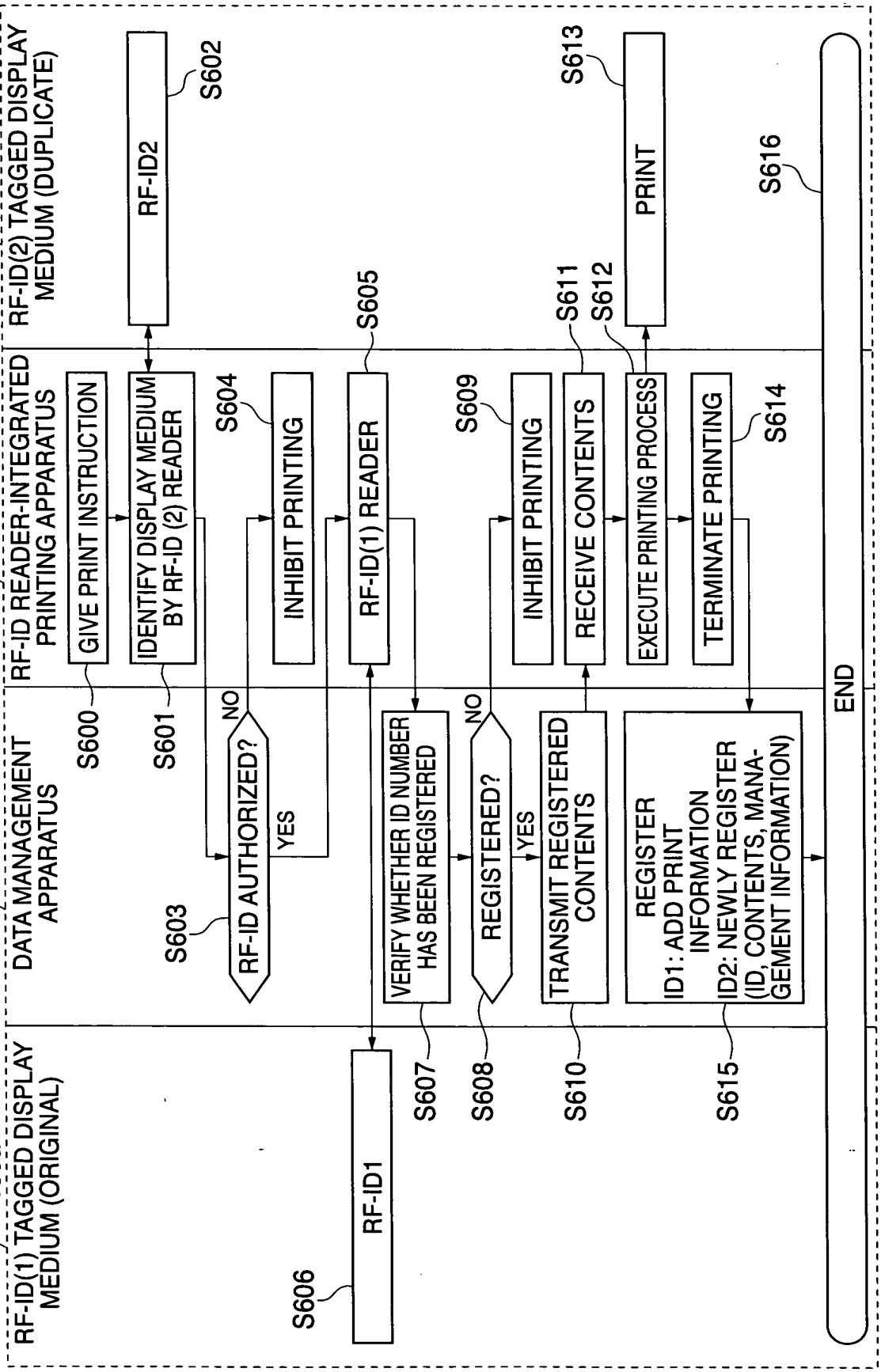
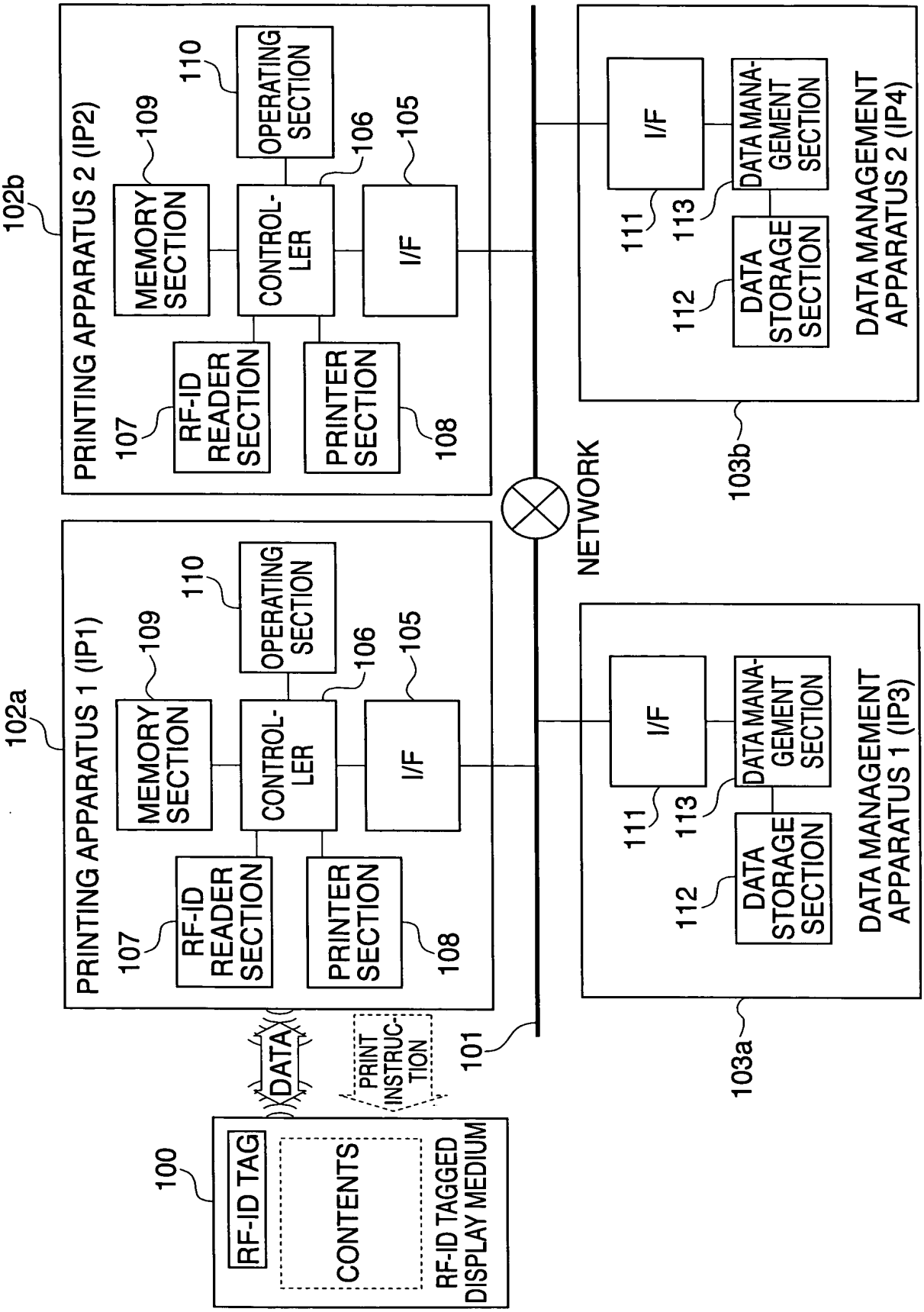

100a
RF-ID(1) TAGGED DISPLAY MEDIUM (ORIGINAL)
103
DATA MANAGEMENT APPARATUS
102
RF-ID READER-INTEGRATED PRINTING APPARATUS
100b
RF-ID(2) TAGGED DISPLAY MEDIUM (DUPLICATE)
GIVE PRINT INSTRUCTION
S600
IDENTIFY DISPLAY MEDIUM BY RF-ID (2) READER
S601
RF-ID2
S602
RF-ID AUTHORIZED?
S603
NO
YES
INHIBIT PRINTING
S604
RF-ID(1) READER
S605
RF-ID1
S606
VERIFY WHETHER ID NUMBER HAS BEEN REGISTERED
S607
REGISTERED?
S608
NO
YES
INHIBIT PRINTING
S609
TRANSMIT REGISTERED CONTENTS
S610
RECEIVE CONTENTS
S611
EXECUTE PRINTING PROCESS
S612
PRINT
S613
REGISTER
ID1: ADD PRINT INFORMATION
ID2: NEWLY REGISTER (ID, CONTENTS, MANAGEMENT INFORMATION)
S615
TERMINATE PRINTING
S614
END
S616

FIG. 7


100
RF-ID TAG
CONTENTS
RF-ID TAGGED DISPLAY MEDIUM
DATA
PRINT INSTRUC-TION
101
NETWORK
102a
PRINTING APPARATUS 1 (IP1)
MEMORY SECTION
109
OPERATING SECTION
110
CONTROL-LER
106
I/F
105
RF-ID READER SECTION
107
PRINTER SECTION
108
102b
PRINTING APPARATUS 2 (IP2)
MEMORY SECTION
109
OPERATING SECTION
110
CONTROL-LER
106
I/F
105
RF-ID READER SECTION
107
PRINTER SECTION
108
103a
DATA MANAGEMENT APPARATUS 1 (IP3)
I/F
111
DATA MANA-GEMENT SECTION
113
DATA STORAGE SECTION
112
103b
DATA MANAGEMENT APPARATUS 2 (IP4)
I/F
111
DATA MANA-GEMENT SECTION
113
DATA STORAGE SECTION
112